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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/057,406	04/08/1998	HARALD WERENICZ	94-36-3-US-D	6379

7590

08/26/2005

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EXAMINER
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AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/057,406

Applicant(s)

WERENICZ ET AL.

Examiner

Jeff H. Aftergut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-12,33-36,38-42,44 and 46-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-12,33-36,38-42,44 and 46-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 2-12, 33-36, 38-42, 44, and 46-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maletsky in view of the state of the prior art as evidenced by any one of Smith, Thomson et al (newly cited), U.K. 688,637 (newly cited previously of record), French Patent 1,571,760 (newly cited, previously of record), U.K. 1,160,190 (newly cited, previously of record), Henkel et al (newly cited), or Elliott (newly cited) optionally further taken with either one of Cardinal et al (newly cited, previously of record, the article entitled "A New Cost Effective Method To Confer Tailored Breathability And Liquid Barrier Properties To Nonwovens") or Korpman (newly cited).

Maletsky et al '202 describes hot melt adhesive compositions which would have been useful an operation for providing a coating to a nonwoven in the manufacture of a disposable diaper. More specifically, Maletsky et al '202 suggested that thin pinhole free films would have been extrusion coated (coated from an extruder) upon nonwovens wherein the adhesive composition included compositions which were the same as applicant's disclosed compositions (amorphous polyolefin and VESTOPLAST, see example 1 and Table B where the use of the amorphous thermoplastics were recognized as having soft hand and excellent ease of application and the VESTOPLAST was recognized as having soft hand and good ease of application. The same compositions described by Maletsky et al '202 must have the same properties of complex

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viscosity due to the intrinsic nature of the material. The reference to Maletsky '202 suggested that one skilled in the art would have applied thin coatings of 0.65-1.5 mils in thickness upon the nonwoven. Additionally, the reference suggested that those skilled in the art would have applied the coating at temperatures between 300-500 degrees F (which is 149-260 degrees C) and that the viscosity of the polymer would have lied between 40-1500 poise in the operation, see column 5, lines 52-column 6, line 6. Note that in example 1 the viscosity of the amorphous thermoplastic composition is measured to be 110 poise. The reference made it clear that those skilled in the art at the time the invention was made would have employed hot melt adhesives in a diaper construction which met the complex viscosity requirements of applicant's claimed invention (note that use of the same hot melt composition would have necessarily had the same complex viscosity). The reference expressly suggested as identified in the example that the hot melt composition was applied to the nonwoven with an extrusion apparatus. The reference did not expressly state that such an extrusion apparatus would have included the use of a gap between the extruding apparatus (the exit die) and the nonwoven being coated.

The references to any one of Smith, Thomson et al, U.K. 688,637, French Patent 1,571,760, U.K. 1,160,190, Henkel et al, or Elliott suggested that it was known at the time the invention was made to apply a film of a hot melt material via an extrusion apparatus where there was a gap between the extruder and the substrate being coated such that the film of the plastic material was suspended between the extrusion apparatus and the substrate being coated. While the

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reference to Maletsky did not expressly state that such a suspension of the film took place, one skilled in the art of extrusion coating would have understood that such a gap would have existed as extrusion coating where the film was suspended between the exit of the die and the substrate was well known to those skilled in the art as evidenced by the references to any one of Smith, Thomson et al, U.K. 688,637, French Patent 1,571,760, U.K. 1,160,190, Henkel et al, or Elliott. More specifically, the reference to Smith has been discussed at length previously. Smith et al suggested that coating of substrates with olefin polymers was frequently performed via a hot melt extrusion process which involved melting the polymer, extruding the polymer through a slit die to form a molten film of the polymer and depositing the molten film onto the substrate (i.e. there was a spanning of the molten polymer film between the die exit and the substrate), see column 1, lines 26-34. The reference to Smith et al suggested that thin coatings of .25-10 mils were possible using this technique. Additionally, the coatings in Smith were stated to have been applied to fabric materials. Thomson suggested that hot melt extrusion process included the steps of extruding the material in a molten state through a slit die to form a molten film and depositing the molten film into the substrate it was desired to coat, see column 1, lines 14-21, for example. The coatings in Thomson were applied to substrates including fabric substrates. U.K. '637 suggested that a conventional extrusion apparatus for coating a film upon a substrate included an extruder as well as a pair of nip rolls and that the coating film was extruded a suspended between the slit die of the extruder and the film being coated, see page 2, lines 13-23, the Figure. The reference to

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French Patent '760 clearly established that it was common practice to apply hot melt coatings from an extruder to a substrate by extruding a film of the material and allowing it to fall from the extruder to the substrate in a curtain coating operation. Applicant is more specifically referred to the translation of the reference. The reference to U.K. '190 suggested that those skilled in the art would have understood that curtain coating with a molten thermoplastic would have included the extrusion of the molten material from the die to form a film and application of the film onto the substrate whereby the operation included a gap between the exit of the die and the substrate. The reference to Henkel et al suggested that coating a plastic upon a substrate usually included extruding a molten film of the polymer through the die and application from the same onto the substrate. Clearly, a gap was disposed between the exit of the die and the substrate. Regarding the reference to Elliott, the reference suggested that a molten film of thermoplastic was extruded from a die and placed upon the substrate where a gap (i.e. the film is suspended) exists between the exit of the die and the substrate and the operation included extrusion at temperatures of between 190-300 degrees F (88-148.8 degrees C). Clearly, each one of the references to Smith, Thomson et al, U.K. 688,637, French Patent 1,571,760, U.K. 1,160,190, Henkel et al, or Elliott suggested that those skilled in the art would have known that application of a plastic hot melt coating upon a substrate via an extrusion apparatus wherein there is a gap between the exit of the die and the substrate as was usually the case. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ conventional

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extrusion processing which included an extruder with a slit die through which the film was dispensed prior to application upon the substrate where the substrate was spaced from the exit of the die as suggested by any one of Smith, Thomson et al, U.K. 688,637, French Patent 1,571,760, U.K. 1,160,190, Henkel et al, or Elliott in the process of applying a hot melt adhesive film upon a substrate in an extrusion coating apparatus as taught by Maletsky '202.

While the references as set forth above suggested the overall operation, to further evidence that those skilled in the art at the time the invention was made in the art of making a disposable diaper would have understood that there would have been a gap between the extruding die and the substrate being coated the references to Cardinal or Korpman are cited. It should be noted that Maletsky relates to the application of the hot melt coating in the manufacture of a disposable diaper. The references to Cardinal and Korpman both suggested that those skilled in the art would have extruded a material from a die and allowed the molten material exiting the die to be applied to the substrate after exiting the die where the die was not in direct contact with the substrate. Applicant is specifically referred to the figures of the references. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the hot melt material in the manufacture of a diaper wherein the material was applied onto the substrate from a die which was not in direct contact with the substrate as evidenced by either one of Korpman or Cardinal et al wherein one employed conventional extrusion processing which included an extruder with a slit die through which the film was dispensed prior to application upon the substrate

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where the substrate was spaced from the exit of the die as suggested by any one of Smith, Thomson et al, U.K. 688,637, French Patent 1,571,760, U.K.

1,160,190, Henkel et al, or Elliott in the process of applying a hot melt adhesive film upon a substrate in an extrusion coating apparatus as taught by Maletsky '202.

3. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 2 further taken with either one of Waggoner or U.K. 688,637 for the same reasons as expressed in paragraph 3 of the Office action dated September 14, 2004.

#### ***Response to Amendment***

4. The declaration under 37 CFR 1.132 filed July 25, 2005 is sufficient to overcome the rejection of claims based upon the reference to E.P. '013.

The declaration is sufficient to evidence that those skilled in the art would have understood that the surface nozzle in E.P. '013 meant that the nozzle was in contact with the surface. The experiments performed by declarant appear to suggest that in order to achieve a continuous coating in E.P. '013 one would have had to have had the surface of the nozzle in contact with the web as depicted and described.

#### ***Response to Arguments***

5. Applicant's arguments filed July 25, 2005 have been fully considered but they are not persuasive.

The applicant essentially takes the position that the extrusion apparatus of Maletsky is not spaced from the web being coated. It is correct to state that the



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reference to Maletsky does not express that the extrusion apparatus was in contact with the web or that the extrusion apparatus was spaced from the web. The reference does suggest that one skilled in the art would have applied the coating via an extrusion apparatus, however there is no indication whether there was a gap between the extruder and the substrate.

The applicant argues that Smith does not disclose that it was known in hot melt coating operations that there would have been a gap between the extruder and the substrate despite the fact that this has already been considered by the Board of Appeals whereby the previous decision indicated that the Board interpreted the reference to mean that the use of a gap in hot melt coating operations with an extruder was typical of an extrusion operation for extrusion coating. The newly cited references discussed above all further evidence that one skilled in the art would have known to apply via an extrusion apparatus a hot melt molten film upon a substrate whereby there was a gap between the exit of the die and the substrate being coated where the film was suspended between the exit of the die and the substrate.

### ***Conclusion***

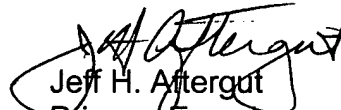
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dunn can be reached on 571-272-1171. The fax

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phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jeff H. Aftergut  
Primary Examiner  
Art Unit 1733

JHA  
August 24, 2005